

Breathable and Waterproof Lining Structure for Footwear and Garment

Abstract of the Disclosure

A waterproof and breathable lining structure includes a sheet-like waterproof and breathable foaming cushion layer made of a composition of a predetermined amount of low density polyethylene (LDPE) and a predetermined amount of foaming agent such as azodicarbonamide (ADCA), and a fabric lining layer integrally adhered to one side of the cushion layer to form the lining structure. The cushion layer is made by a process including the steps of: (a) palletizing raw materials including the low density polyethylene and the foaming agent such as Azodicarbonamide (ADCA); (b) extruding the palletized raw material to make a solid sheet; (c) cross-linking the solid sheet by an E-beam to form an irradiated matrix; (d) foaming the irradiated matrix into the sheet-like foaming cushion layer.